

**COMPOSITION AND METHOD FOR PREPARING
CHEMICALLY-RESISTANT ROUGHENED COPPER
SURFACES FOR BONDING TO SUBSTRATES**

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ABSTRACT

The invention is directed to a method and composition for providing chemically-resistant roughened copper surfaces suitable for subsequent multilayer lamination. In one embodiment, a smooth copper surface is contacted with an
10 adhesion promoting composition under conditions effective to provide a roughened copper surface, the adhesion promoting composition comprising an oxidizer, a pH adjuster, a topography modifier, and a sulfur-containing coating stabilizer. In another embodiment, a smooth copper surface is contacted with an adhesion promoting composition under conditions effective to provide a
15 roughened copper surface, the adhesion promoting composition comprising an oxidizer, a pH adjuster, and a topography modifier. Then, in a subsequent step, the roughened copper surface is contacted with an acid resistance promoting composition.